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# Indian Standard

# MEAT AND MEAT PRODUCTS — CANNED HAM, MINCED — SPECIFICATION

### भारतीय मानक

मांस एवं मांस उत्पाद — डिब्बा बंद हैम, कीमा — विशिष्टि

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

July 1989

## AMENDMENT NO. 1 MARCH 2004 TO

## IS 12542: 1988 MEAT AND MEAT PRODUCTS— CANNED HAM, MINCED— SPECIFICATION

(Page 1, clause 4.1) — Insert the following clause after 4.1:

'4.1.1 Quality of water used for processing shall conform to IS 4251.'

( Page 3, Annex A) — Insert reference of the following Indian Standard at the appropriate place:

1S. No.	Title
4251 : 1967	Quality tolerances for water for processed food industry
(FAD 18)	
	Reprography Unit, BIS, New Delhi, India

# AMENDMENT NO. 2 APRIL 2011 TO IS 12542: 1988 MEAT AND MEAT PRODUCTS— CANNED HAM, MINCED—SPECIFICATION

[Page 2, clause 5.2(c)] — Substitute 'Net quantity of the contents of the can;' for 'Net mass of the contents of the can;'.

[Page 2, clause 5.2(k)] — Substitute the following for the existing:

'k) Any other marking required under the Standards of Weights and Measures (Packaged Commodities) Rules, 1977, and the Prevention of Food Adulteration Act, 1954 and the Rules framed thereunder.'

(FAD 18)

#### **FOREWORD**

This Indian Standard was adopted by the Bureau of Indian Standards on 23 December 1988, after the draft finalized by the Meat Industry Sectional Committee, AFDC 18 had been approved by the Agricultural and Food Products Division Council.

The demand of meat products including canned minced ham, is increasing day by day in civil as well as defence establishments. In view of the vastness of the country and spread over of consumers in distant places where fresh ham is not available, it is imperative to meet the requirements by supply of canned ham, minced.

In the preparation of this standard, due consideration has been given to the provisions of the *Prevention of Food Adulteration Act*, 1954 and the Rules framed thereunder, the *Meat Food Products Order*, 1973 and *Standards of Weights and Measures* (*Packaged Commodities*) Rules, 1977. However, this standard is subject to the restrictions imposed under these rules wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

# Indian Standard

# MEAT AND MEAT PRODUCTS — CANNED HAM, MINCED — SPECIFICATION

#### 1 SCOPE

This standard prescribes the requirements and methods of sampling and tests for canned ham, minced.

#### 2 REFERENCES

The Indian Standards listed in Annex A are necessary adjuncts to this standard.

#### 3 TERMINOLOGY

3.1 For the purpose of this standard, the following definitions shall apply.

#### 3.1.1 Canned Ham, Minced

Canned ham, minced shall be a cured product of fresh ham and shoulder of pig.

#### 3.1.2 Meat

The uncured, sound and wholesome meat of the pig, namely, pork used as food.

#### **4 REQUIREMENTS**

### 4.1 Hygienic Requirements

The factory, processing and employee hygiene shall be as per IS 8182: 1976.

#### 4.2 Raw Material

- **4.2.1** The meat for the preparation of canned minced ham shall be derived from fresh ham and shoulders of pigs (see IS 1723: 1973).
- 4.2.2 Meat after curing shall be in good condition at the time of use. It should not be frozen after curing.
- 4.2.3 The salt used for curing shall conform to IS 253: 1985.
- 4.2.4 Only food grade nitrite of sodium or potassium shall be used.
- 4.2.5 Monosodium glutamate, ascorbates and phosphates of food grade may be used.

#### 4.3 Preparation

During preparation of canned minced ham, the precautions given in 4.3.1 to 4.3.5 shall be exercised in the sequence mentioned below.

4.3.1 Meat obtained from fresh ham and shoulders shall be cured at refrigeration temperature.

- 4.3.2 Meat shall be kept for a suitable period at a suitable temperature to develop desirable colour and flavour.
- 4.3.3 After proper curing and deboning the meat shall be minced using a plate having a sieve not bigger than 5 mm.
- 4.3.4 The minced meat shall be filled in open top sanitary (OTS) cans. The cans shall be cleaned with hot water before filling. The cans shall be either plain or internally lacquered and hermetically sealed. When lacquered, the lacquer shall not be fat soluble and shall be such that it will not be destroyed, altered or its components transferred to the material during processing or subsequent storage and transport. Care shall be taken to avoid formation of large air pockets.
- **4.3.5** Gelatin, rendered fat and brine may be added as agreed to between the vendor and the purchaser.

#### 4.4 Processing

The filled cans shall be processed at a suitable temperature and pressure and for adequate time to ensure thorough cooking and sterilization of the product without burning, scorching and over cooking.

#### 4.5 Requirements of the Finished Products

#### 4.5.1 Appearance

The product shall be in the form of one solid block and shall be reasonably firm.

#### 4.5.2 Flavour and Colour

The canned minced ham shall have characteristic flavour and taste of pork meat. It shall be neither excessively salty nor sweet and should be free from any foreign odour or flavour such as putrid, stale, fermented, rancid, musty or staggy pork odour. The colour shall be characteristic and uniform. No foreign colour and additive shall be added.

#### 4.5.3 Fill of the Container

The product shall occupy not less than 85 percent of total volume of the container when tested according to the method prescribed in the Appendix A of IS 4352: 1967.

#### 4.5.4 Freedom from Defects

The product shall be free from foreign matters like dirt, insect parts, wood, glass, metal, bones etc.

#### IS 12542: 1988

#### 4.5.5 Composition

When tested according to the method prescribed in Appendix B of IS 4352: 1967, the finished product shall have good lean meat content which shall be not less than 80 percent by mass of the total content.

#### 4.5.6 Vacuum

The cans shall give a negative pressure of not less than 150 mm of mercury at  $27 \pm 20^{\circ}\text{C}$  under normal atmospheric pressure. Head space shall not be less than 15 mm.

4.5.7 The material shall also conform to the requirements given in Table 1.

#### 5 PACKING AND MARKING

#### 5.1 Packing

#### 5.1.1 Packing in the Cans

The material shall be packed in suitable open top sanitary cans (4.3.4).

#### 5.1.2 Packing in Cases

The cans shall be packed in suitable cases. Number of cans in each case shall be subject to agreement between the purchaser and the packer.

#### 5.2 Marking

The labelling of the cans may be done either by printing or stencilling on the cans themselves or by attaching labels printed on paper subject to agreement between the purchaser and the packer, and shall bear the following information:

- a) Name of the material along with the brand name, if any;
- b) Name and address of the manufacturer;

- c) Net mass of the contents of the can;
- d) Ingredients used, by mass, in descending order of composition;
- e) Date of manufacture shall be embossed indelibly on one end of the can only, and the embossing shall be raised;
- f) Batch or code number embossed indelibly on the lid of the cans;
- g) Declaration to the effect that no artificial colouring agent has been used;
- h) MFPO licence number and its category;
- j) Warranty period to be given by the packer; and
- k) Other requirements according to the Standards of Weights and Measures ( Packaged Commodities ) Rules, 1977.

#### 5.2.1 Standard Marking

Details available with the Bureau of Indian Standards.

#### 6 SAMPLING

Sampling of the canned minced ham, shall be done according to the method prescribed in Appendix C of IS 4352: 1967.

#### 7 TESTS

7.1 Tests shall be carried out as prescribed in 4.5.1 to 4.5.6 and Table 1.

7.1.1 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (see IS 1070: 1977) shall be used.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the test

Table 1 Requirements for Canned Ham, Minced

( Clause 4.5.7 )

SI No.	Characteristic	Requirement	Method of Test, Ref to	
			IS 5960	IS 1743 : 1973
(1)	(2)	(3)	(4)	(5)
i) Sodi	um chloride, percent by mass	1.5 to 3.5	Part 4	
	ite content ( as NaNO <sub>2</sub> ) ent by mass, <i>Max</i>	0.02	Part 7	_
iii) Arse	nic, mg/kg, Max	1.00		Appendix B
iv) Lead	i, mg/kg, Max	2.5	***	Appendix C
v) Cop	per, mg/kg, Max	20.0		Appendix D
vi) Zinc	, mg/kg, Max	50.0		Appendix E
vii) Tin	, mg/kg, <i>Max</i>	250.0		Appendix F
viii) Mic	crobiological Requirements	To satisfy the test requirements		Appendix G

#### Standard Mark

The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

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